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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,953	02/02/2001	Stephen D. Flanagin	13768.192	1535
22913	7590	12/03/2003		
WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111				
			EXAMINER ABRAHAM, ESAW T	
			ART UNIT 2133	PAPER NUMBER 5

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,953

Applicant(s)

FLANAGIN ET AL.

Examiner

Esaw T Abraham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims **1 to 31** are presented for examination.

Information Disclosure Statement

2. The examiner has considered the references listed in the information disclosure statement submitted on 05/16/01 and 10/14/03 (see attached PTO-1449).

Claim objections

3. Claims 4-8, 12, 16, 19, 20, 27, and 30 are objected to because of the following informalities:
 - a) Claim 4 recites “the object to deleted” instead of “the object to be deleted”.
 - b) Claims 5, 8, 12, 19, 20, 27 and 30 recite “the tracking data” instead of “a tracking data”.
 - c) Claim 6 recites “the wireless device” instead of “the device”.
 - d) Claims 7 and 29 recite “the store register” instead of “a store register”.
 - e) Claim 16 recites “ the first device module” instead of “ the first device sync module” on line 21.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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4. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included and excluded by the claim language with the use of the phrase: “**may be** deleted form the store” in lines 19 and 20. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims **1-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ulrich et al. (U.S. PN: 6,052,735) in view of Alam et al. (U.S. PN: 6,324,544).

As per claims **1 and 23**, Ulrich et al. in figure 5 disclose or teach a mobile device (3) and desktop computer (4) used in synchronizing objects stored in object store (6) on mobile device and object store (8) on desktop computer and further the mobile device includes synchronization interface component (100), synchronization manager (102), remote application

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programming interface server (116), and electronic mail messaging transports (132, 134 and 136) and the desktop computer includes, synchronization interface component (108), synchronization manager (110) (see figure 5 and col. 8, lines 15-34). Ulrich et al. teach that the desktop computer and the mobile device contain personal information management systems, such as objects maintained by applications synchronized between the desktop computer and the mobile device (see col. 2, lines 60-65 and abstract). Further, Ulrich et al. teach that filtering techniques can be implemented during synchronization (see abstract). Ulrich et al. **do not explicitly** teach deleting objects from the mobile store without deleting the corresponding objects synchronization partner (desktop computer). **However**, Alam et al. in an analogous art in figure 1 disclose a system comprising a mobile device (12) and desktop computer (14) including a synchronization manager on a mobile device interacts with synchronization providers (144 and 146) to determine whether any objects on object stores have been added, deleted, or changed since the last synchronization process (see col. 12, lines 48-67). Further, Alam et al. teach maintaining a mapping table which maps objects to be synchronized between the first and the second object stores and determining whether the object added to the first object store and if the process already exists on the first object store deleting the already existing object from the first object store and updating the mapping table to map the object added to the first object store (see claim 1). Furthermore, Alam et al. teach an exclusion list utilized during conversion when a critical information is not lost so the system suppresses selected user interface messages under appropriate circumstances, deals with file locking problems, and does not synchronize non-relevant files (see, col. 22, lines 1-16). **Therefore**, it would have been obvious to a person having an ordinary skill in the art at the time the invention

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was made to implement the device (mobile) of Ulrich et al. employing a process of deletion in the mobile device for deleting objects as taught by Alam et al. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated to increase efficiency of file synchronization (see col. 22, lines 8-11).

As per claims **2 and 24**, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claims 1 and 23 including Ulrich et al. teach that filtering techniques can be implemented during synchronization and predetermined attachments are automatically provided to the electronic mail message object store on the mobile device (see abstract).

As per claims **3 and 25**, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claims 1 and 23 including Alam et al. teach that the system creates an exclusion list utilized during conversion when a critical information is not lost so the system suppresses selected user interface messages under appropriate circumstances, deals with file locking problems, and does not synchronize non-relevant files (see, col. 22, lines 1-16).

As per claims **4, 9, 26 and 31**, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claims 1 and 23 including Alam et al. teach a synchronization manager on a mobile device interacts with synchronization providers (144 and 146) to determine whether any objects on object stores have been added, deleted, or changed since the last synchronization process (see col. 12, lines 48-67). Further, Alam et al. teach maintaining a mapping table which maps objects to be synchronized between the first and the second object stores and determining whether the object added to the first object store and if the process already exists on the first object store deleting the already existing object from the first object store (see claim 1). Ulrich et al. in view of Alam et al. **do not explicitly** teach a method of deleting objects as soft delete.

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However, the technique of using a soft delete for deleting objects is known in the art for most of mobile data communication systems. Therefore, it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to employ a process that performs a soft delete to reserve a record space available for overwrite by converting it to a "gap" record. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated in order to increase memory utilization efficiency.

As per claims **5 and 27**, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claims 1 and 23 including Alam et al. teach maintaining a mapping table which maps objects to be synchronized between the first and the second object stores and determining whether the object added to the first object store and if the process already exists on the first object store deleting the already existing object from the first object store and updating (the tracked data) the mapping table to map the object added to the first object store (see claim 1).

As per claims **6-8 and 28-30**, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claims 1 and 23 including Ulrich et al. in figure 5 disclose a mobile device includes a synchronization manager (102) (see figure 5 and col. 8, lines 15-34). Further, Alam et al. in figure 1 disclose a mobile device (12) including a synchronization manager on mobile device interacts with synchronization providers (144 and 146) to determine whether any objects on object stores have been added, deleted, or changed since the last synchronization process (see col. 12, lines 48-67).

As per claims **10 and 18**, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claims 1 and 23 including Alam et al. in figure 6 disclose a synchronization manager on mobile device interacts with synchronization providers (144 and 146) to determine whether

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any objects on object stores have been added, deleted or changed since the last synchronization process (see col. 12, lines 48-67). Further, Alam et al. teach maintaining a mapping table which maps objects to be synchronized between the first and the second object stores and determining whether the object added to the first object store and if the process already exists on the first object store deleting the already existing object from the first object store and updating the mapping table to map the object added to the first object store (see claim 1). Ulrich et al. in view of Alam et al. **do not explicitly** teach a method of deleting objects as soft delete.

However, the technique of using a soft delete for deleting objects is known in the art for most of mobile data communication systems. Therefore, it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to use a process that performs a soft delete to reserve a record space available for overwrite by converting it to a "gap" record. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated in order to increase memory utilization efficiency.

As per claims **11-12, 16, and 20-22**, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claims 10 and 18 including Ulrich et al. teach that filtering techniques can be implemented during synchronization (see abstract) and further, Alam et al. in figure 6 disclose a synchronization manager on mobile device interacts with synchronization providers (144 and 146) to determine whether any objects on object stores have been added, deleted or changed since the last synchronization process (see col. 12, lines 48-67). Furthermore, Alam et al. teach maintaining a mapping table which maps objects to be synchronized between the first and the second object stores and determining whether the object added to the first object store and if the process already exists on the first object store deleting the already existing object from

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the first object store and updating the mapping table to map the object added to the first object store (see claim 1).

As per claim 13, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claim 10 including Alam et al. teach a method of synchronizing objects indicative of file data between a first object store associated with a first computing device and a second object store associated with a second computing device and the method further comprising maintaining a mapping table which maps objects to be synchronized on the first object store with corresponding objects on the second object store (see claim 1).

As per claims 14, 15 and 17, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claim 10, including Alam et al teach a method of synchronizing objects indicative of file data between a first object store associated with a first computing device and a second object store associated with a second computing device, the objects having associated file names, the method comprising: maintain a mapping table which maps objects to be synchronized on the first object store with corresponding objects on the second object store; determining whether an object to be synchronized has been added to the second object store since a last synchronization process; if so, adding a corresponding object to the first object store during a subsequent synchronization process; determining whether the object added to the first object store during the subsequent synchronization process already exists on the first object store under a different file name; if so, deleting the already existing object from the first object store; and updating the mapping table to map the object added to the first object store to the object which was renamed on the second object store (see claim 1).

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As per claim 19, Ulrich et al. in view of Alam et al. teach all the subject matter claimed in claim 18 including Alam et al. in figure 15 disclose a flow chart diagram illustrating utilization of the exclusion list created for mobile device 12 whereby the synchronization components detect that an object needs to be synchronized indicated by block 354 and the exclusion list is then examined to determine whether the object type (e.g., file extension) contained in the exclusion list indicated by block 356 and if the object type is not contained in the exclusion list, the object is simply synchronized to the desktop device and the change notification on device 12 is cleared indicated by blocks 358 (see col. 20, lines 9-19).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US PN: 5,710,922	Alley et al.
US PN: 6,370,566	Discolo et al.
US PN: 5,758,354	Huang et al.
US PN: 6,463,427	Wu

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (703) 305-7743. The examiner can normally be reached on M-F 8-5.


If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (703) 305-9595. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Esaw Abraham

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